

ABSTRACT**USE OF SURFACE MEASURING PROBES**

5 A method of measuring an artefact 5 using a machine 2
on which a measuring probe 6 is mounted. The probe is
brought into contact with the artefact and movement
continued for a limited distance to deflect the stylus
7. The machine and probe outputs are recorded whilst
10 the probe is free and when the stylus is deflected. A
model of the probe and CMM outputs during both contact
and non-contact between the probe and artefact is
fitted to the data to allow the contact position when
the stylus contacts the artefact with zero force to be
15 determined. The probe outputs may be fitted to the
model individually to determine a single contact
position. By using data during movement of the probe
towards and away from the artefact, errors due to time
delays may be corrected.

20
Fig 3